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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,216	01/21/2004	Kia Silverbrook	MPA08US	1373

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EXAMINER	
GOLDBERG, BRIAN J	

ART UNIT	PAPER NUMBER
2861	

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/760,216	SILVERBROOK ET AL.	
	Examiner	Art Unit	
	Brian Goldberg	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al. (US 6439908).

3. Regarding claim 1, Silverbrook et al. disclose "at least one printhead module (10 of Fig 2) comprising at least two printhead integrated circuits (18 of Fig 4), each of which has nozzles formed therein for delivering printing fluid onto the surface of print media (col 3 ln 45-47), and a support member (16 of Fig 7) supporting and carrying the printing fluid for the at least two printhead integrated circuits; a casing (14 of Fig 3) in which the at least one printhead module is removably mounted by having a first side thereof slidably received in a longitudinally extending groove (64 of Fig 2) of the casing and a second side thereof clamped to the casing by a clamp mounted to the casing (94 and curved edge of 14 of Fig 2)." The structure of 94 and the curved edge of 14 can serve as a clamp in that it assists in holding the printhead module 10 in place. Alternatively, one could consider "a casing (28 of Fig 8) in which the at least one printhead module is removably mounted by having a first side thereof slidably received in a longitudinally extending groove (94 of Fig 6) of the casing and a second side thereof clamped to the casing by a clamp mounted to the casing (44 of Fig 6)."

4. Regarding claim 2, Silverbrook et al. disclose "wherein the clamp (94 and curved edge of 14 of Fig 2) is employed to constrain movement of the printhead module relative to the casing in the direction of printing fluid delivery from the nozzles to the print media." The clamping arrangement of figure 2 holds the module firmly in place, constraining movement of the module in all directions.

5. Regarding claim 3, Silverbrook et al. disclose "the casing comprises a longitudinally extending channel portion within which the at least one printhead module is mounted, the channel comprising first and second side walls joined by a lower wall (channel formed by side walls 64 and 94 of Fig 2 and joined by lower wall marked 14 in Fig 1); the first side wall including the longitudinally extending groove (groove formed by 64 of Fig 2) and the longitudinally extending groove being formed between upper and lower longitudinally extending tabs (see upper and lower tabs of 64 of Fig 2); and the second side wall having a longitudinally extending upper surface (bottom surface of 94 of Fig 2) upon which the second side of the at least one printhead module is mounted, the longitudinally extending upper surface having a height from the lower surface of the channel portion substantially equal to a height of the lower longitudinally extending tab of the first side wall (height of 94 is substantially equal to height of 64 as seen in Fig 2)."

6. Regarding claim 4, Silverbrook et al. disclose "the casing includes a support frame (64, 94, lower parts of 76 and 32 of Fig 2), and a cover portion (28 of Fig 6); and the clamp engages with the support frame (see Fig 2). The clamp is part of the support frame, and thus engages with the support frame.

7. Regarding claim 5, Silvebrook et al. disclose "the at least one printhead module (10 of Fig 2) is formed as a unitary arrangement of the at least two printhead integrated circuits (18 of Fig 4), the support member (16 of Fig 7), at least two fluid distribution members (26 of Fig 7) each mounting one of the at least two printhead integrated circuits to the support member, and an electrical connector (48, 22 of Fig 8) for connecting electrical signals to the at least two printhead integrated circuits (col 3 ln 59-65); and the support member has at least one longitudinally extending channel (80 of Fig 7) for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures (42 of Fig 7) extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (see Fig 7 and col 3 ln 45-47)."

Response to Arguments

8. Applicant's arguments filed 2/6/06 have been fully considered but they are not persuasive.

9. Regarding claim 1, the current application contains integrated printhead circuits 51 on tiles 50 that are arranged on top of the fluid channel member 40, which extends the length of the printhead as can be seen in figure 4A. As stated in paragraph [0090] of the present application, "as illustrated in Figs. 1 and 2, sixteen printhead tiles 50 [each with one integrated printhead circuit 51 as seen in figure 5A] are provided in the printhead module 30." In figures 1 and 2, the arrow of 30 is pointing to a single printhead tile/integrated circuit, but the figures show that there are sixteen printhead

tile/integrated circuits comprising the entire length of the printhead. Therefore, if sixteen printhead tiles are provided in the printhead module as stated, then the module must be the entire length of the apparatus shown in figures 1 and 2, with one fluid channel member 40 (or a series of sixteen interconnected fluid channel members) containing sixteen sets of outlet ports 42 as shown in figure 4A, and sixteen printhead tiles/integrated circuits on the upper surface of that one fluid channel member (or series of fluid channel members). Hence, either each printhead module (indicated by the arrow of 30 in figures 1 and 2) has only one printhead tile/integrated circuit, which contradicts the claim, or the printhead module is to be taken to mean the entire length shown in figures 1 and 2 where the module has at least two printhead tiles/integrated circuits and is shown in the figures with sixteen printhead tiles/integrated circuits.

A similar analysis can be applied to the cited reference, and the printhead module 10 can be taken to mean the entire length shown in figure 2 to satisfy the claimed printhead module of the instant application. Furthermore, the structure of 94 and the curved edge of 14 in the cited reference can serve as a clamp in that it assists in holding the printhead module 10 in place. Also, the argument that the clips constrain the movement of the modules relative to the chassis as an undesired effect is not in fact an undesired effect since claim 2 states that the clamp is employed to constrain movement of the printhead module relative to the casing.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJG

April 5, 2006

Thinh Nguyen
Primary Examiner
Technology Center 2800